BEFORE THE ADMINISTRATOR
U.S. ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C.

In the Matter of:	
Old Dominion Electric Cooperative Clover, Virginia Permit Applicant	PSD Appeal No. 91-39

ORDER DENYING REVIEW

In a petition dated June 3, 1991, the Southern Environmental Law Center, et al. (Petitioners) requested review of a Prevention of Significant Deterioration (PSD) permit issued to Old Dominion Electric Cooperative (Old Dominion), for the construction of a 786 megawatt pulverized coal-fired steam electric generating station in Halifax County near Clover, Virginia. The proposed facility will be operated by Virginia Electric & Power Company (Virginia Power), a 50% co-owner of the facility, on behalf of both Old Dominion and Virginia Power. The permit determination was made by the Virginia Department of Air Pollution Control (Virginia or the State) on April 29, 1991, pursuant to a delegation of authority from the U.S. Environmental Protection Agency (EPA), Region III, Philadelphia, Pennsylvania. Because of the delegation, the Virginia permit is considered an EPA-issued permit for purposes of federal law (40 CFR §124.41 (1990); 45 Fed. Reg. 33413 (May 19, 1980)), and is subject to the review provisions of the applicable EPA regulations before becoming final, 40 CFR §124.19 (1990).

Under the regulations governing this proceeding, there is no review as of right from the permit decision. See generally 40 CFR §124.19. Review is discretionary. Ordinarily, a petition for review of a PSD permit determination is not granted unless it is based on a clearly erroneous finding of fact or conclusion of law, or involves an important matter of policy or exercise of discretion that warrants review. The preamble to the regulations states that "this power of review should be only sparingly

exercised," and that "most permit conditions should be finally determined at the Regional [State] level * * *." 45 Fed. Reg. 33,412 (May 19, 1980). The burden of demonstrating that the permit should be reviewed is therefore on the Petitioners. After examining the issues raised by Petitioners, I conclude that Petitioners have not satisfied that burden in this instance.

Virginia and Old Dominion filed responses to the petition stating their opposition to any review of the permit determination; Petitioners, in turn, filed a reply to the responses. Petitioners' principal objections to the permit are addressed below, seriatim.

A.

Increment Analysis. Section 165(a)(3) of the Clean Air Act provides that a permit applicant must demonstrate that emissions from the proposed facility "will not cause, or contribute to, air pollution in excess of," inter alia, certain statutorily allowable increases in pollutant levels, called "increments," in any area where PSD requirements apply, including specially designated mandatory "class I" areas--certain national parks and wilderness areas--where required measures to protect air quality are particularly stringent. See also 40 CFR §52.21(k). A complementary demonstration requirement appears in Section 165(d)(2)(C)(i) of the Act, which provides that in any case where the Federal Land Manager for a mandatory class I area files a notice alleging that emissions from the proposed facility may cause or contribute to a change in air quality in the area and identifying the potential adverse impact of such change, a permit shall not be issued unless the permit applicant demonstrates that the facility's emissions of particulate matter and sulfur dioxide (SO2) will not cause or contribute to a violation of an increment in the class I area.

The Petitioners claim that Old Dominion did not perform the required demonstration for the Shenandoah National Park (Park), which is a class I area, notwithstanding notification from the Park's Federal Land Manager of the proposed facility's potential adverse impacts on air quality related values in the Park. Petitioners contend that the State's failure to require this demonstration is particularly egregious because the State had received modeling results from another permit applicant which indicated that existing permits currently exceed the class I increment at the Park and that emissions from the Old Dominion

facility and sources closer to the Park would result in a violation of the class I increment. According to Petitioners the failure of the State to require such a demonstration under the circumstances is reversible error. Specifically, because there is no dispute that Old Dominion did not submit a demonstration for the Park pursuant to either Section 165(a)(3) or Section 165(d)(2)(C)(i), Petitioners argue that Old Dominion's permit application was not complete, and therefore the State erred in issuing the permit.

The validity of Petitioners' argument rests entirely on their assertion that such a demonstration is required even though the proposed facility will be located approximately 135 kilometers from the Park's nearest boundary.

EPA guidance has not specified that the demonstration requirement applies regardless of how distant a class I area may be from the source in question. Thus, EPA has implicitly countenanced the view that, as a practical matter, pollution sources may be too distant from a specific area to have anything except an imperceptible or insignificant effect on the area in question. In other words, the mere possibility of pollution molecules being transported from a source to a class I area is not, by itself, sufficient reason to trigger the demonstration requirements of the Clean Air Act.

In the case of the proposed Old Dominion facility, the State followed its policy of not requiring modeling of increment impacts for proposed facilities located more than 100 kilometers from the Park. It also rejected the notion that the results from the other permit applicant were determinative of the pending applicant's impact on the class I area. According to Virginia, the policy it follows reflects its concern that the models used for this analysis overpredict pollutant concentrations at long distances and that substantial questions exist about their accuracy when employed at distances greater than approximately 50 kilometers. In Virginia's view, therefore, when it requires analysis for distances up to 100 kilometers, it is providing an added measure of environmental protection beyond what is strictly justified by the limited accuracy of the models. Accordingly, it did not require modeling for the Park, which is more than 100 kilometers from the proposed facility. The State did, however, require analysis of potential increments impacts at the James River Face Wilderness (the Wilderness), which is located approximately 99 kilometers from the proposed facility. The analysis for the Wilderness demonstrated to the State's satisfaction that the class I increments would not be violated in this area. Considering these findings for the Wilderness, which

is located closer to the facility than the Park (and therefore potentially subject to even greater adverse impacts than the Park), and considering that EPA has not issued any final guidance that would contravene the State's policy, Virginia did not clearly err in deeming Old Dominion's application complete even though Old Dominion did not supply a demonstration for the Park under Section 165(a)(3) of the Clean Air Act. Therefore, review of the permit for the reasons stated by Petitioners is not justified.

B.

Findings of Adverse Impacts on Air Quality Related Values. Section 165(d)(2)(C)(ii) of the Act provides that, notwithstanding that the emissions from a proposed facility do not cause or contribute to exceedances of the class I increment in an area, a permit shall not be issued in any case where the Federal Land Manager of a mandatory class I area demonstrates to the satisfaction of the State that the emissions from the facility will have an adverse impact on the air quality related values (including visibility) of the class I area. See also 40 CFR §52.21(p)(4). Petitioners claim that the State clearly erred in rejecting the adverse impact determinations of the Federal Land Managers for the Park and the Wilderness that Old Dominion would have an adverse impact on the air quality related values of their respective class I areas. I disagree. While the permit issuer must give reasonable consideration to a Federal Land Manager's assertion of an adverse impact, the final decision rests with the permitting authority. See generally 50 Fed. Reg. 28544, 28549 (July 12, 1985). Section 165(d)(2)(C)(ii) clearly states that a demonstration by a Federal Land Manager that a facility will have an adverse impact on the air quality related values of a class I area must be made to the "satisfaction of the State." For the reasons discussed below, the State did not commit clear error in rejecting the Federal Land Managers' assertions regarding the proposed facility's adverse effects on the Park or the Wilderness.

Adverse Impacts--The Park. The Federal Land Manager's adverse impact determination for the Park is contained in a letter dated September 25, 1990, and in a December 19, 1990 letter and supporting documents. The Federal Land Manager reasoned that since certain air quality related values, visibility primarily, are subject to deterioration in the Park, the addition of new sources of pollution (referring not just to the proposed Old Dominion facility, but also to that facility

plus several other proposed sources scheduled for construction in Virginia over the next several years) will by necessity only exacerbate existing impaired conditions. Virginia concluded that the Federal Land Manager's determination was largely a qualitative analysis and did not reveal any significant link between the proposed source and air quality at the Park. Nevertheless, the State asked EPA for assistance in further evaluating the Federal Land Manager's claim.

The Federal Land Manager's claim of an adverse impact from the proposed Old Dominion facility largely hinges on the assumption that there is a demonstrable causal connection between the facility and the predicted adverse impact on the Park. However, the facts to support such a claim are not contained in the Federal Land Manager's determination, nor was the claim verifiable insofar as EPA was able to determine. The facts do show that air quality in the Park is adversely impacted by existing sources. However, in response to the State's request for assistance, EPA conducted a preliminary modeling analysis ("RELMAP") in an effort to assess the Federal Land Manager's adverse impact finding for the Park. See note 23 and accompanying text, infra. This analysis did not confirm the Federal Land Manager's finding. Based on the RELMAP analysis, EPA found that it could not conclude that Old Dominion would have an adverse impact on the Park, or the Wilderness. Virginia did not clearly err, then, when it issued the permit after it and EPA were unable to confirm the Federal Land Manager's assertions. Virginia ultimately rejected the findings of the Federal Land Manager on several grounds, concluding generally, however, that the findings were unsubstantiated and speculative.

Finally, I note for the record that the Park's Federal Land Manager subsequently entered into an agreement with Old Dominion that provides for environmentally beneficial reductions in pollutant levels from the proposed facility and from levels of allowable pollutant emissions at an existing facility. The latter reductions are termed "offsets." As a result, the Federal Land Manager for the Park has noted in the agreement that based on the performance of the terms therein it withdraws its adverse impact determination.

Adverse Impacts--The Wilderness. Petitioners claim the State erred in rejecting the Federal Land Manager's findings of adverse impact for the Wilderness. While the Federal Land Manager's analysis supporting its finding on the Wilderness presents a somewhat stronger technical case than was presented for the Park, the State's decision to issue the permit nevertheless did not constitute clear error. The determination

that Old Dominion would have an adverse impact on air quality related values at the Wilderness was based on the Federal Land Manager's findings of increases in sulfur deposition and acidification. See December 14, 1990 letter from Joy E. Berg, Forest Supervisor, to Wallace Davis of the State. The single source modeling method used by the Federal Land Manager, which projected a 2% to 4% increase in sulfur deposition, appears on its face to be reasonable, but the State noted several reasons why the method may have significantly overestimated impacts. See Board Book Response at Section V.B. As discussed further below, EPA's regional RELMAP modeling supports the State's view regarding overestimation: it suggests an increase in deposition only 1/10th as large as the Federal Land Manager's estimate for the Wilderness. In addition, as also discussed below (paragraph C), the Federal Land Manager for the Lye Brook Wilderness used a similar analysis in estimating impacts of the proposed Halfmoon Cogeneration project and significant questions about its accuracy there have been raised. These questions about the accuracy of the Federal Land Managers' findings suggest that the State acted reasonably in exercising its discretion under the Act to reject the Federal Land Manager's findings. See CAA §165(d)(2)(C)(ii) and 40 CFR §52.21(p)(4). Moreover, Petitioners have not persuaded me that there is any other evidence in the record to support its contention. For these reasons, no reviewable error stems from the State's rejection of the adverse impact determination for the Wilderness.

Petitioners' "Rational Basis" Argument. Petitioners argue that to have a rational basis for rejecting the Federal Land Managers' analyses of the impacts of the proposed facility on the Park and the Wilderness, the State must arrive at its determination after conducting its own analysis of the impacts alleged by the Federal Land Managers. Petitioners describe several facets of the State's legal and policy conclusions which lead them to conclude that the State never analyzed the adverse impacts alleged by the Federal Land Managers, thus signifying to Petitioners that the State's actions lack a rational basis.

While it is true, as Petitioners assert, that the State appears at various points to surrender responsibility for independently analyzing the Federal Land Managers' adverse impact findings, a just reading of the State's response to the findings by the Federal Land Managers reveals that the State rejected the findings of adverse impact because it either was unable to verify the assertions made by the Federal Land Managers or it believed that their analyses tended to overstate impacts. See, e.g., Board Book Response at Section V.B. (Virginia

identifies several reasons why the Federal Land Manager's analysis of adverse impacts for the Wilderness may have overstated impacts). These realities overshadow the criticisms that might otherwise be directed at some of the State's specific arguments for rejecting the Federal Land Managers' findings. For example, as to the Park, the Federal Land Manager's reasoning, as noted previously, relies in substantial part on the fact that visibility and other air quality related values in the Park have deteriorated, and concludes therefrom that the addition of other sources of pollution will inevitably cause further damage to the Park. The problem with the Federal Land Manager's claim of an adverse impact on the Park from the proposed Old Dominion facility is that it hinges on an unproven assumption, i.e., that any emissions from the facility will have an adverse impact on the Park. The truth of this assertion is not self-evident. Moreover, the facts to support such a claim are not contained in the Federal Land Manager's determination, nor were any uncovered in the analysis conducted by EPA. Among other things, the Federal Land Manager did not provide any quantitative measures of the impact of these sources (other than the MPTER modeling properly rejected by the State (see supra note 12)), and did not attempt to isolate the Old Dominion facility from the collective impact that supposedly would result from the construction of the other facilities in Virginia over the next several years. Under the circumstances, since the logic behind the Federal Land Manager's conclusions is not especially compelling, and since there is no verification of the conclusions through quantitative analysis, it was not unreasonable for the State to reject those conclusions. Petitioners are unreasonable in arguing, as they do, that in the absence of quantifiable tools to measure and identify the source of an adverse impact on a class I area, it was incumbent upon the permit issuer to refute the Federal Land Manager's "qualitative analysis"--as Petitioners refer to it--or accept it as proven fact. As the record stands, the Federal Land Manager's so-called "qualitative analysis" could just as easily be termed an "unverified supposition" insofar as it purports to attribute a causal connection between the proposed facility and adverse impacts on air quality related values. The record demonstrates that neither the State nor EPA Region III has been able, despite reasonable efforts, to confirm the supposition with reliable, scientific studies or data. Likewise, the State declined to accept the supposition based upon the Federal Land Manager's "qualitative analysis." No error results from rejecting the findings of the Federal Land Manager under these circumstances.

Cumulative Impacts. Petitioners assert that the State erred when it contended that the Federal Land Manager for the Park must demonstrate that emissions from each new source must by itself have an adverse impact on air quality related values, including visibility. Although Petitioners recognize that Federal Land Managers must assess whether each source will contribute to an adverse impact, Petitioners take the position that the Federal Land Managers can meet their burden under Section 165(d)(2)(C)(ii) by merely showing that proposed sources collectively will adversely impact class I areas. I disagree. PSD permit determinations are made individually under the Act on a case-by-case basis, and the State is not required to withhold or deny a permit application for a qualified source based upon the supposition that there might be an adverse impact on visibility in an area if other pending applications are subsequently approved.

While it may be prudent in such circumstances for a State to consider the collective potential impacts on visibility from all prospective sources that have not yet received final permits, nothing cited by Petitioners requires this type of planning. Under existing EPA policy, the State is not required to evaluate the collective impact of those prospective sources that have not yet received permits. While EPA's policy may result in situations where applicants at the end of a permitting queue face denial of their applications because an area's visibility "growth margin" has been depleted (by those at the front of the queue), that possibility is not dispositive of the issue raised by Petitioners. It is enough to note that the State's policy of not considering prospective but as yet unpermitted sources is consistent with EPA's present cumulative impact policy for visibility. EPA's policy contains an adequate safeguard against impermissible encroachments on visibility in class I areas. Specifically, by requiring every permitted but not yet constructed source to be taken into consideration, EPA's policy considers the potential adverse impacts of every new source capable of causing an adverse impact on the area in question. It also obligates the State to refrain from issuing permits whenever the addition of one more source in conjunction with all previously permitted sources (including those not constructed) would have the effect of causing an adverse impact on visibility in the class I area. In any event, there is no compelling need to speculate further on the potential impact of the unpermitted sources that Petitioners have identified as cause for concern. It suffices to note that the RELMAP modeling analysis conducted by EPA Region III did account for visibility impacts of all

prospective sources (permitted or not), and could not confirm the presence of an adverse impact from that cumulative growth.

RELMAP Modeling Analysis of Adverse Impacts. The State asked EPA Region III for technical assistance in assessing the findings of the Federal Land Managers for the Park and the Wilderness. The Region responded by performing the RELMAP analysis, the results of which it formally reported to the State on January 25, 1991. The Region noted, inter alia, that the Federal Land Manager for the Park did not provide a technical analysis for its findings in either the Federal Register notice announcing its preliminary findings or the accompanying Technical Support Document; and that the reasoning underlying the findings was basically that visibility is impaired already and therefore any additional emissions from new sources would cause an adverse impact. EPA attempted to quantify the impacts in order to provide a reasonable basis for evaluating the findings of the Federal Land Managers. The Region concluded that its technical assessment using the RELMAP model did not substantiate the contention that emissions from the proposed Old Dominion facility would cause adverse impacts on the visibility values and aquatic resources of the Park or the Wilderness. EPA Region III readily acknowledged in its letter to Virginia that the assessment it performed had deficiencies. In recognition of the deficiencies, it concluded by noting that, although no adverse impact was found, "[w]e do reserve the opportunity to revisit these issues as additional analytical tools become available for use in the future." On appeal, the Petitioners argue that these deficiencies render the assessment flawed, for they "[do] not support a conclusion of no adverse impact * * *."

This argument by Petitioners does not persuade me to review the State's permit determination. Under the circumstances presented here I do not read the Act as imposing a burden on the permit issuer to prove that the proposed facility will not have an adverse impact on the two class I areas. Neither EPA nor Virginia is contending that Region III's technical assessment proves or is capable of proving such an impact will not occur. Rather, the assessment EPA performed represents a measured, analytical response to the Federal Land Managers' findings, using available tools, and is by comparison more technically rigorous and probative than the analyses they used. It showed that the allegations of the Federal Land Managers could not be substantiated by the analysis EPA conducted. Therefore, until such time as more sophisticated tools are applied to measure the impact of sources under the circumstances presented, the assessment performed by EPA represents the best available

evidence in the record of the facility's impact on the two areas. The fact that the assessment may be inconclusive does not make it clear error for Virginia to have granted the Old Dominion permit. As the delegated permit issuer, the State was authorized to reject the Federal Land Managers' findings after concluding on reasonable grounds, as it did here, that they could not be substantiated.

C.

Consistency Between Regions. The Petitioners argue that there are parallels between this proceeding and a PSD permit proceeding in EPA Region II, involving the Halfmoon Cogeneration Project, where the Region provisionally accepted findings of adverse impact on the Lye Brook Wilderness by the Federal Land Manager for that area. However, Region II is reconsidering its initial acceptance of the findings as a result of subsequent analyses performed by the Halfmoon applicant, which tend to show, inter alia, lower long-term SO2 levels and correspondingly lower deposition than originally indicated. The initial estimates may have been significantly overstated and therefore the issue is being revisited. Accordingly, I am not persuaded that there is such a fundamental split in approach between the two permit issuers to warrant review for the purpose of achieving national uniformity.

D.

Quantity of NOx Emissions. The Petitioners raise concerns about the adequacy of consideration given by the State to the annual amount of NOx emissions from the proposed facility. The Petitioners' concerns manifest themselves in numerous arguments wherein the Petitioners basically contend that additional analyses should have, but were not, performed by the applicant (e.g., relating to ozone formation or nitrification impacts upon the Chesapeake Bay). The State has adequately responded to these arguments by demonstrating that the submissions it required of the applicant fully satisfy all of the requirements set forth in EPA regulations and guidelines. It points out that modeling of NOx emissions for impact on ozone formation was not required because there is currently no acceptable EPA-approved method for assessing ozone impacts attributable to individual point sources of NOx emissions.

The State further points out that the proposed facility is located quite far from the Chesapeake Bay (approximately 220 km). Also, the Chesapeake Bay is not a class I area. For all of these reasons, the State did not require Old Dominion to perform any impact analysis for the Bay. The State also notes that the analyses of impacts of the proposed facility on forest and vegetation areas was also done in accordance with EPA requirements. The Petitioners have not persuaded me that the State has committed any reviewable error as alleged.

E.

BACT Analysis--Consideration of Environmental Impacts.

The Petitioners contend that Virginia did not give adequate attention to environmental impacts in its analysis of best available control technology (BACT) for the facility's NOx emissions. The State responds by suggesting that the Petitioners' discussion appears to confuse the BACT determination with the separate issue of the facility's compliance with National Ambient Air Quality Standards (NAAQS) or increments. I am inclined to agree with the State. While collateral environmental impacts are relevant to the BACT determination, their relevance is generally couched in terms of discussing which available technology, among several, produces less adverse collateral effects, and, if it does, whether that justifies its utilization even if the technology is otherwise less stringent. See generally, Columbia Gulf Transmission Company, PSD Appeal No. 88-11, at 7 (June 21, 1989) ("For example, if the most effective technology would impose exceptional demands on local water resources, so that use of the technology would have adverse impacts on the environment, then, under those circumstances, the applicant would have a sound basis for foregoing use of the most effective technology in favor of some less water-intensive technology."); North County Resource Recovery Associates, PSD Appeal No. 85-2 (Remand, June 3, 1986) (environmental impact of pollutants not regulated under the Clean Air Act may necessitate a more stringent emission limit for regulated pollutants undergoing BACT review). The Petitioners' discussion of collateral environmental impacts is not framed in this manner and makes no specific comparison of alternative technologies. Therefore, consideration of this issue as presented by the Petitioners is rejected as lacking in specificity and clarity.

In any event, Virginia did not clearly err in deciding not to assess environmental impacts in conducting the BACT analysis

in the manner put forth by Petitioners.

Clean Fuel Alternative. Petitioners allege that the State unlawfully failed to consider natural gas as an alternative fuel for the proposed facility, contrary to the dictates of Section 403(d) of the Clean Air Act Amendments of 1990, amending the definition of BACT in Section 169(3) of the Act. The State responds to this contention by pointing out that it can impose alternative fuel requirements on an applicant if the applicant cannot meet all federal and state air emission limitations. In this case, however, the applicant met all of those limits, and since the modeling within the relevant impact areas has demonstrated that the NAAQS will not be violated, the State did not require the use of natural gas. The State did not feel it was authorized to "redefine the source," i.e., to alter the fundamental scope of the project, since Old Dominion had previously considered the alternative of using gas turbines to power the facility, but ultimately rejected that approach because of higher capital cost, low unit efficiency, and the unavailability of natural gas in the Clover area. No clear error is apparent in the State's handling of this matter, although EPA does not view the new statutory language as being limited to instances where an applicable NAAQS or increment is at risk. Rather, EPA construes the 1990 Amendments as conferring discretion on the permit issuer to consider clean fuels other than those proposed by the permit applicant. See Letter from William G. Rosenberg, Assistant Administrator for Air and Radiation, EPA, to Henry A. Waxman, Chairman, Subcommittee on Health and Environment, House Committee on Energy and Commence (Oct. 17, 1990) (enclosure at 4). The State exercised its discretion in accord with EPA's reading of the Amendments.

Selective Catalytic Reduction (SCR). Petitioners argue that the State failed to give adequate consideration to SCR as an alternative control technology for NOx emissions from the proposed facility. It argues that the technology settled upon by the State is roughly one-half as effective as SCR. In support, the Petitioners point to comments in the record by EPA Region III that make reference to numerous instances of SCR use for coal-fired power plants in Japan and Germany and of one instance in the United States, in a proposed coal-fired cogeneration industrial boiler in New Jersey, where a permit has been issued requiring that it be employed. The State counters by asserting that it is not required to consider foreign applications of SCR, citing Mecklenburg Cogeneration Limited Partnership, PSD Appeal No. 90-7 (Order Denying Review, December 21, 1990) (noting that SCR had not been employed domestically

with a facility and fuel source the same as the applicant's), and second, that the New Jersey permit may be disregarded because the project is not yet operational and, thus, the use of SCR has not been demonstrated.

The SCR issue Petitioners raise is altogether familiar by reason of the Mecklenburg decision. On the one hand it is immediately clear that the addition of the New Jersey facility to the SCR rolls is a new and noteworthy event; on the other hand it is by no means immediately clear that the event renders Virginia's decision clearly erroneous. In the one year since Mecklenburg was decided, there have been instances of acceptance of SCR for large scale facilities of the type proposed by the permit applicant, but not so as to render clearly erroneous the rejection of SCR on technical grounds, at least at the time the State issued the Old Dominion permit. In this regard, it is relevant that the New Jersey plant had not yet employed SCR at the time of the State's permitting decision in this case. The actual use of SCR in coal-fired boilers was still limited to foreign, primarily European, facilities. Both Old Dominion and the State distinguished those facilities from Old Dominion's by pointing to potentially significant differences in coal type (particularly, trace element content) and boiler design that may adversely affect catalyst life and operating characteristics. Although these differences apparently were not closely scrutinized by the State, the record also does not conclusively demonstrate that the State should have required SCR in this instance. As noted at the beginning of this Order, the regulations governing appeals of permit determinations contemplate that the permit issuer--in this case the State--shall make the permit determination, and that review by the Administrator shall be only sparingly exercised. Even though EPA Region III, for example, might well have arrived at a different determination had it been the permit issuer of record, the Petitioners have not persuaded me that the State's choice represents clear error, because the evidence "for" and "against" SCR was (at the time of permit issuance) in such close balance. Differences of opinion in such circumstances do not necessarily translate into error by one and correctness by the other; rather, they can easily reflect genuine differences of opinion--i.e., differences best left for resolution to the informed discretion of the permit issuer. Consequently, I decline to review the State's determination not to require SCR for the Old Dominion facility. However, as more information comes to light (for example, when the New Jersey facility comes on line or other similar facilities are permitted for SCR), any future claims of

technological or economic infeasibility by permit applicants (or permit issuers) will inevitably be subject to greater scrutiny, and to be sustainable, the claims will have to be accompanied by a detailed, case-specific analysis of all relevant factors.

BACT Analysis--Timing Considerations. The Petitioners claim that "the BACT analysis for the [Old Dominion] plant is contrary to the law and regulations because the decision was effectively made prior to the public involvement process and was not made on a case-specific basis." Petition at 58. This allegation does not state any basis for concluding that the State erred. It is essentially irrelevant that, as Petitioners allege, the State may have held a fixed view of how the BACT determination should be made during the period preceding the public comment process. Error would only ensue if it were alleged and shown that the State thereafter refused to conduct a meaningful evaluation of the public's comments. The Petitioners make no such allegation and have not shown any instance in which there is substantial reason to believe that the State did not give full and fair consideration to public comment. Accordingly, review is not warranted; Petitioners have not shown or alleged any error.

F.

Petitioners assert that the permit should not issue until EPA has reviewed and revised the long-term visibility strategy for protecting the Park and the Wilderness. Matters such as these, which relate to adoption of a long-term strategy to prevent visibility impairment under Section 169A of the Clean Air Act, are beyond the scope of this permit proceeding under Section 165 the Act. EPA has previously determined that the visibility provisions for new sources as implemented through the PSD program constitute a fully adequate long-term strategy to prevent future impairment of visibility from new sources. See 52 Fed. Reg. 45135, 7807-7808 (1987). By raising the long-term strategy as an issue, Petitioners are attempting to use this proceeding to mount an otherwise impermissible collateral attack on EPA's implementation of Section 169A. This is the wrong forum in which to maintain such an attack; accordingly, review of this issue will not be entertained.

G.

Additional Public Comment. EPA Region III commented on the draft permit and criticized aspects of Old Dominion's modeling as it related to increment consumption for the Wilderness. As a result, certain assumptions in the modeling were changed and Old Dominion agreed to tighten its emission limits so that no increment violation would be shown. The State revised the permit accordingly and issued it in final form without soliciting further comment from the public. Although the revised permit calls for reduced SO2 emissions, Petitioners argue that the State or the Administrator should solicit further comment on the revised modeling. In my opinion no further comment is necessary. First, Petitioners do not allege in their Petition that the State's failure to solicit additional comment constituted clear error or otherwise met the criteria for reviewing a permit determination under 40 CFR §124.19. See Petition at paragraph VII. Second, even if Petitioners had made such an allegation, I would decline the request because I do not find that Virginia clearly erred in deciding not to reopen the comment period in this case.

The decision by the permit issuer to reopen the public comment period is discretionary, as is clear from the plain terms of the regulation that authorizes a reopening of the comment period by the permit issuer. See 40 CFR §124.14(b) (the permit issuer "may" reopen the comment period if it appears that substantial new questions were raised during the public comment period). There is no indication the State abused its discretion by not reopening the comment period in this case.

The record reveals that during the public comment period, EPA Region III objected to the input of certain assumed values in Old Dominion's increment modeling for the Wilderness. Although Old Dominion believed the assumed values to be conservative, it accepted Region III's request to substitute actual values instead. The resulting analysis indicated the potential, under certain conditions, for increment violations in the Wilderness unless the draft permit was modified somewhat. Old Dominion obliged by agreeing to a tightening of the permit's SO2 emission limits so that there would be no increment violation. Petitioners believe the modified permit and revised modeling should be subjected to an additional period of public comment. Virginia disagrees, arguing that the initial modeling was adequate, that the commenter--EPA Region III--is satisfied with the response by Old Dominion and the State, and that in any event no further public comment is required by the regulations.

While there may be times when a revised permit differs so greatly from the draft version that additional public comment is

required (the discretionary wording of 40 CFR §124.14(b) notwithstanding), this is not one of those instances. The increment modeling underlying the SO2 emissions in the draft permit was properly subjected to public comment. Region III's concerns with the modeling were addressed by the permit applicant in a manner that satisfies Region III, and it is self-evident that Petitioners are in no position to oppose the decision to tighten the permit's SO2 emissions. Petitioners are not worse off with the revision than without it. Moreover, there is no reason to believe that tightening the emissions limitation is likely to result in unanticipated adverse environmental consequences in comparison with retention of the previous, less stringent SO2 emissions limitation. The revised permit by all accounts is a logical outgrowth of the notice and comment process and all commenters have had a fair and reasonable opportunity to present their views on the permit. To require further comment in the face of Old Dominion and Virginia's responsible actions might discourage substantive responses to public comments in the future, as well as introduce additional delay to the permit proceeding.

Conclusion

For the reasons stated above, it is my conclusion that review of the State's permit determination is not warranted. It meets all necessary requirements of federal law. Therefore, the petition for review is denied. In accordance with 40 CFR §124.19(f)(2), the Regional Administrator of EPA Region III or his delegatee shall "promptly" publish notice of this final action in the Federal Register.

So ordered.

Dated:

William K. Reilly
Administrator

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Order Denying Review in the matter of Old Dominion Electric Cooperative, Clover, Virginia, PSD Appeal No. 91-39, were sent to the

following persons by First Class Mail, Postage Prepaid:

David W. Carr, Jr.
Southern Environmental Law Center
201 West Main Street, Suite 14
Charlottesville, VA 22901

Wallace N. Davis
Executive Director
Commonwealth of Virginia
Dep't of Air pollution Control
9th Street Office Bldg.
Room 801
P. O. Box 10089
Richmond, VA 23240

John S. Seitz, Director
Office of Air Quality Planning & Standards
U.S. EPA, Region III
841 Chestnut Building
Philadelphia, PA 19107

Bessie Hammiel
Hearing Clerk
A-110
Room 3708

Charles A. Partizia
Paul, Hastings, Janofsky & Walker
1050 Connecticut Avenue, NW
Twelfth Floor
Washington, DC 20036

Dated:

Brenda H. Selden
Legal Staff Specialist

1/ The SELC filed its petition on behalf of itself and the Conservation Council of Virginia, Sierra Club, National Parks and Conservation Association, Trout Unlimited, Environmental Defense Fund, Natural Resources Defense Council, The Wilderness Society, Southside Concerned Citizens, and Virginia Wildlife Federation.

2/ See Petition at paragraphs I.A.& B. and VI. ("Statement of Reasons for Southern Environmental Law Center, et al. Appeal of Old Dominion Electric Cooperative (Clover, VA) PSD Permit No. 30867," dated June 3, 1991) (hereafter the "Petition").

3/ Petitioners assume that the Federal Land Manager's September 25, 1990 letter to Virginia constituted notice within the meaning of section 165(d)(2)(C)(i) of the Act. See petition at 9. This assumption appears to be erroneous. The September 25, 1990 letter in pertinent part constituted elaboration and transmittal of a September 18, 1990 Federal Register notice in which the Federal Land Manager for the Park announced preliminary findings of adverse impact under section 165(d)(2)(C)(ii) of the Act. For this reason the Petitioners' claim that Old Dominion did not perform the demonstration required by section 165(d)(2)(C)(i) is not properly before me. Nevertheless, to the extent the discussion addressing Petitioners' claim under section 165(a)(3) of the Act also applies to Petitioners' claims under section 165(d)(2)(C)(i), I have addressed the substance of these claims.

4/ It is the policy of the State "to require a Class I increment analysis for PSD sources proposing to locate within 100 kilometers of any Class I area." Virginia's response to Petition, dated July 30, 1991, at 4.

5/ Virginia indicated that the findings of the other permit applicant do not provide evidence that it clearly erred in failing to require the demonstration. According to Virginia, at the time ODEC's application was deemed complete there were no demonstrated exceedances of the class I increment in the Park.

6/ Draft guidance released by EPA in October 1990 and distributed to the States recommends analysis beyond 100 kilometers when there are potential impacts on a class I area. While this guidance has not yet become final, it reflects EPA's

concern that increments analysis include class I areas when there are reasonable questions about a proposed facility's impacts on such areas. As a draft policy, however, it does not have the same weight as a binding Agency position and does not prohibit the States from adopting their own policies that are consistent with the Clean Air Act and applicable regulations. Nevertheless, EPA's draft policy reflects the Agency's latest thinking on when it is appropriate to require increment analyses for class I areas, and is based upon the availability and feasibility of modeling tools for assessing such impacts. For this reason, Virginia should consider reexamining its current policy.

7/ Although a Federal Land Manager's assertion of an adverse impact under Section 165(d)(2)(C)(i) triggers a duty on the part of the applicant to perform an increment analysis, no error occurs when the State subsequently determines that the Federal Land Manager's assertion lacks sufficient hard scientific data to sustain the charge of an adverse impact. Assuming, arguendo (see note 3 supra), that the Federal Land Manager's demonstration for the Park under section 165(d)(2)(C)(ii) constituted notice under section 165(d)(2)(C)(i), such a determination was made in this instance. (See discussion in paragraph B. of the text.) Requiring the applicant to supply a separate demonstration under such circumstances, i.e., after the permit issuer has examined and rejected the merits of the Federal Land Manager's findings would serve no legitimate purpose. Cf. United States Postal Service, Board of Governors v. Aikens, 460 U.S. 711 (1983) (once the merits of a case are heard, it is error to focus on the procedural question of whether the plaintiff succeeded in establishing a prima facie case, rather than on the ultimate question of the merits). At most, the failure of the applicant to submit a demonstration in such circumstances constitutes harmless error.

8/ See generally Petition at paragraph II.

9/ This is not to suggest, however, that the permit issuer's discretion in rejecting a finding is unfettered. See generally 50 Fed. Reg. 28544, 28549 (July 12, 1985). It merely signifies that, so long as it is not exercised in an arbitrary or capricious manner, the permit issuer's discretion takes precedence under the statute.

10/ Similarly, EPA's implementing regulations provide that a permit shall not be issued when the permit issuer concurs with

the Federal Land Manager's demonstration. See 40 CFR §52.21(p)(4).

11/ See Petition at paragraph II.A.

12/ The Federal Land Manager for the Park also used the MPTER model to predict SO2 concentrations, which were then converted to sulfates and used to estimate short-term (24-hour) impacts on visibility in the Park. The State evaluated and responded to the modeling results, finding them "clearly inadequate" for this purpose, tending to overstate impacts. Modeling cited by Petitioners and performed by Dr. Michael Williams is also highly likely to overstate short-term impacts. These analyses are contradicted by the analyses submitted by Old Dominion and EPA Region III's RELMAP analysis. It is not error for the State to determine that, in light of contradictory evidence, the MPTER model and Dr. Williams' analysis were not sufficiently convincing.

13/ The highlights of the agreement are described in the State's response to the Petition. See Virginia Response, dated July 30, 1991 (Appendix, Document No. 40).

14/ The offsets consist of reductions in SO2 and NOx emissions from Virginia Power's Mt. Storm (West Virginia) facility in amounts greater than the actual emissions of these pollutants projected for the proposed Old Dominion facility. See Virginia Response, dated July 30, 1991 (Appendix, Document No. 40).

15/ The State argues that the Federal Land Manager's adverse impact determination for the Park was absolutely withdrawn in the agreement and that the issues raised by this determination have become moot by the withdrawal. Petitioners respond by pointing out that the agreement is executory and argue that the Federal Land Manager's withdrawal is conditioned upon complete execution of the terms of the terms of the agreement. Petitioners also question the legality of the withdrawal, alleging that if in entering into the agreement the Federal Land Manager withdrew its adverse impact finding then the form of such withdrawal contravenes applicable procedural requirements. For purposes of deciding whether to exercise my discretionary powers of review of the State's permit determination, I do not find it necessary to resolve the exact legal status of the adverse impact finding. For my purposes, the largely qualitative nature of the Federal Land Manager's adverse impact finding and the failure of the

subsequent analysis conducted by EPA to corroborate that finding lead me to conclude that the State did not commit clear error in issuing the permit.

16/ See Petition at II.A.

17/ The Federal Land Manager for the Wilderness did not claim that Old Dominion would have an adverse impact on visibility.

18/ The original letter from the Federal Land Manager indicates the analysis was based on the annual SO2 impact predicted by Old Dominion's modeling, but does not provide details of the calculations. Those details are contained in a separate paper that was reviewed by the State. See generally Board Book Response at Section V.B. The State did not receive detailed analysis from the Federal Land Manager until after the close of the public comment period.

19/ See Petition at paragraphs II.B. and II.C. (1), (2), (3), & (5).

20/ For example, the State relied in part on the absence of guidance on de minimis levels for class I area adverse impacts as a basis for its rejection of the Federal Land Manager's adverse impact determination for the Wilderness. See "Board Book Response" at Section V.B. National guidance on de minimis impacts for class I air quality related values is in no way a prerequisite to a reasonable determination by a permit-issuing authority that the Federal Land Manager has demonstrated a proposed source will have adverse impacts. However, in this instance any State error regarding de minimis levels may be viewed as harmless. As noted elsewhere, while the Federal Land Manager's method for determining adverse impacts at the Wilderness was reasonable, Virginia explained that it may have overstated the impacts. It was not clear error for the State to reject the Federal Land Manager's finding for this reason and the reasons noted previously.

21/ The course of Petitioners' argument runs as follows:

> EPA has not approved models for assessing episodic impacts of proposed sources on the Class I areas. Given that the quantitative tools are not available, the FLM must properly present a qualitative analysis. Unless the State can provide a rational basis for refuting the qualitative

> analysis, it must accept the FLMs' findings. The State has provided no rational basis for a finding contrary to the FLMs' expert and well reasoned qualitative assessments.

Petition at 22.

22/ Petitioners acknowledge that the concerted actions of EPA and the State bear on the determination of whether or not to sustain a finding of an adverse impact. Specifically, Petitioners assert, citing the Federal Register, 50 Fed. Reg. 28549, that the Federal Land Manager and the reviewing authority (meaning the State and the Environmental Protection Agency) "share responsibility" to determine whether an adverse impact will result from a proposed facility. As previously noted in the text, supra, the Environmental Protection Agency participated in that shared responsibility by, inter alia, responding to the State's request for assistance for technical guidance. In recognition of that responsibility, I have taken the results of the Agency's response to the State's request into account in evaluating whether or not to review the State's permit determination. (See discussion above regarding the RELMAP modeling analysis.)

23/ See Petition at paragraph II.C.(4).

24/ Petitioners note that EPA has previously concluded that "a source's impact on visibility must be considered in the context of background visibility impacts caused by both existing and previously permitted, but not yet built sources." See Petition at 24 (citing 50 Fed. Reg. at 28548 (July 12, 1985)). Petitioners are correct that under EPA rules, in determining whether a proposed source will cause an adverse impact on visibility, the cumulative visibility impacts of the pending PSD applicant and all PSD-permitted sources, including those not yet constructed, must be assessed against background visibility conditions. Petitioners evidently seek extension of this policy by suggesting that all proposed sources having applied for permits should be included in the analysis.

25/ Whether the relevant Federal Land Manager or the source bears the burden of demonstrating the impact would depend upon whether the source causes or contributes to an exceedance of the class I increment. See 40 CFR §52.21(p)(4)-(5).

26/ See Petition at paragraph II.D.

27/ Letter from Thomas J. Maslany, Director, Air, Radiation & Toxics Division, EPA Region III, to Wallace Davis, Executive Director, Virginia Department of Air Pollution Control, dated January 25, 1991 (Administrative Record #53).

28/ Id. at 4.

29/ See Petition at 28.

30/ Petitioners have criticized the RELMAP analysis as being significantly limited by its regional scale and its inability to capture episodic impacts. The RELMAP results were based on large grid sizes and were monthly averages. The monthly averages generally are not a problem for assessing sulfate deposition because the effects of concern are usually not of an episodic nature. However, the grid size is a limitation for the Wilderness. Overall, however, the analysis constituted a reasonable assessment of the Federal Land Manager's findings regarding adverse impacts from sulfur deposition.

31/ See Petition at paragraph II.E.

32/ Id. at paragraph III.

33/ EPA does not currently require NOx emissions to be addressed under the existing PSD program when an ozone violation is identified. However, EPA is considering reassessing that policy in light of section 182(f) of the amended Act.

34/ Old Dominion did supply modeling showing to the State's satisfaction that NOx emissions would comply with class I and class II increments and NAAQS limitations.

35/ See Petition at paragraph IV.

36/ "[A]n objection to a permit term or condition must be articulated with the requisite specificity, clarity and support to enable meaningful consideration." In re Resource Technology Services, Inc., RCRA Appeal No. 83-1, at 2, n.2 (September 17, 1983), citing Vermont Yankee Nuclear Power Corp. v. NRDC, 435 U.S. 519, 553-554 (1978).

37/ See Petition at paragraph IV.B.

38/ Traditionally, EPA does not require a PSD applicant to change the fundamental scope of its project. See, e.g., Spokane

Regional Waste-to-Energy Facility, PSD Appeal No. 88-12 (EPA June 9, 1989) (Order Denying Review); Pennsauken Resource Recovery Facility, PSD Appeal No. 88-8 at 11 (EPA November 10, 1988) (Order Denying Review).

39/ However, the BACT analysis should include consideration of cleaner forms of the fuel proposed by the source.

40/ See Petition at paragraph IV.C.

41/ As in Mecklenburg, it is undisputed that the State analyzed the permit application by employing a "top-down" methodology. See, e.g., Virginia Response at 22. Under the top-down method, all of the "available" control technologies are ranked in order of stringency, and the most stringent control technology is evaluated first. If the permit applicant does not intend to use that technology, it demonstrates that the technology would be technically infeasible or justifies rejection based on consideration of energy, environmental or economic impacts, in which case the next most stringent control alternative is evaluated as BACT, and so forth. See, e.g., Mecklenburg at 3-4. Also as in Mecklenburg, a fair reading of the record demonstrates that the necessary steps in a top-down analysis were adequately followed in this case. Specifically, the State addressed SCR as an available technology and considered it in detail before rejecting it on grounds of technical infeasibility. That analysis included consideration of the New Jersey facility, which was permitted just prior to the State's decision in this case.

42/ Id. at paragraph IV.D.

43/ Id. at paragraph V.

44/ Id. at paragraph VII.

45/ Matters raised by Petitioners but not specifically addressed in this Order were not deemed critical to deciding whether discretionary review of the permit determination should be exercised. Accordingly, such matters are also rejected as grounds for reviewing the permit determination.

→